Presiding: Robert Winfree (Chairperson)

Committee Members Present:

Clifford Barrett, CREDA Robert King, UDWR Dave Cohen, Trout Unlimited Don Metz, USFWS Wayne Cook, UCRC Bruce Moore, USBR Wm. E. Davis, EcoPlan Assoc./CREDA Clayton Palmer, WAPA

Kurt Dongoske, The Hopi Tribe Bill Persons, AGFD

So. Paiute Consortium (by Brenda Drye) Andre Potochnik, GC River Guides

Norm Henderson, GCNRA Randy Seaholm, CWCB

Amy Heuslein, BIA John Shields, Wyo. State Engineer's Office

Alternate For:

Robert Winfree, NPS/GCRA Rick Johnson, Grand Canyon Trust

Committee Members Absent:

Tom Latousek, American Rivers Mark Anderson, USGS Pueblo of Zuni (by Loren Panteah) Kerry Christensen, Hualapai Nation Alan Downer, Navajo Nation Phillip S. Lehr, CRCN Christopher Harris, ADWR Fred Worthley, CRBC

Alternates Present:

Brenda Drye, So. Paiute Consortium So. Paiute Consortium Nancy Hornewer, USGS Mark Anderson, USGS

Other Interested Persons Present:

Trudy Ann Cameron, NRC W.L. Minckley, NRC Anthony Morton, USBR Mary Barger, WAPA Gary Burton, WAPA Jacqueline Murphy, USBR Nancy Coulam, USBR-SLC Randy Peterson, USBR Shane Collins, WAPA Barbara Ralston, GCMRC Jeff Jacobs, NRC Larry Sibala, BIA Ruth Lambert, GCMRC Bill Vernieu, GCMRC Mike Liszewski, GCMRC Peter Wilcock, NRC

Steven Lloyd, USBR Scott Loveless, Solicitor's Office Ted Melis, GCMRC

Recorder: Serena Mankiller, GCMRC Secretary Convened: 1:00 p.m. Adjourned: 3:36 p.m.

MEETING OPENING AND ADMINISTRATIVE ITEMS

<u>Welcome</u>: Robert Winfree, the Chairperson, convened the meeting and welcomed committee members, member alternates, and guests. A quorum was present.

Review of Agenda: The Chairperson reviewed the agenda. No revisions were made and the agenda was approved as presented.

Attendance Sheets: Distributed.

Review of Minutes: No minutes were reviewed.

OTHER ADMINISTRATIVE BUSINESS

<u>NPS Research Proposals & Permit Applications:</u> Robert Winfree stated that no PA Program proposals or permit applications have been received. This may delay some river trips. Please contact Robert Winfree if another set of application materials is needed.

GCD AMP Science Symposium: A larger conference room may be needed for the symposium scheduled for February 16-17, 1999. The Albright Training Center at GCNP holds about 100 people and 75 attendees are confirmed so far.

Recommendation: Robert Winfree will investigate if the Shrine of the Ages auditorium is available for the technical science presentations on February 16-17, 1999. The TWG meeting will be held at the Albright Training Center conference room on February 18, 1999.

<u>Calendar</u>: A suggestion was made to develop a regular calendar which includes due dates for MO's/IN's, budget, management plans, etc.

Recommendation: A calendar will be developed and may be incorporated into the Strategic Plan. This suggestion will be investigated at a later date.

<u>Strategic Planning Literature:</u> Jim Wescoat (NRC) offered to provide the TWG members a list of strategic planning literature they may wish to review.

Recommendation: The GCMRC secretary will send the list to the TWG when it is received from Mr. Wescoat.

Additional TWG Meeting: Barry Gold suggested that the February 23-24, 1999, Annual Plan Workshop/Ad Hoc Group Meeting be changed to an official TWG meeting in order to

accomplish approval of the plan. Approval at that time would facilitate the GCMRC RFP release process deadline of April 1, 1999.

Recommendation: An additional meeting may or may not be necessary. If so, there is time to notice an additional official TWG meeting for February 23-24, 1999.

BHBF Alternative Assessment: An error was identified that at the December 8, 1998, TWG meeting the BHBF Alternative Assessment materials used for the presentation (dated November 23, 1998; 18 pages) were not the current copy. The updated copy had been previously mailed to the TWG, (also dated November 23, 1998; 38 pages). The title is "Draft GCMRC Response to the Glen Canyon TWG (ad-hoc group) Request for Assessment of: A Proposal to Develop a Research Plan to Analyze Resource Responses to Alternative BHBF and Load-Following Releases from Glen Canyon Dam."

Comments Process on Strategic & Annual Plans: The current comments process is cumbersome and does not satisfactorily deal with conflicting comments received from the TWG on GCMRC's strategic and annual plans. It was recognized that when the philosophical and policy issues have been resolved, GCMRC's plans will likely be narrowed to projects, scheduling and expenditures. TWG comments will be officially responded to more easily by GCMRC on a separate document which can be addressed by the TWG.

Recommendation: The TWG shall send any other comments on Chapter 4 of the FY2000 Monitoring and Research Plan to GCMRC (electronically) by January 19, 1999. GCMRC will revise chapter 4, annotate all comments and distribute it to the TWG two weeks prior to the February 23-24 meeting.

REVIEW OF AMWG RECOMMENDATIONS AND ASSIGNMENTS

Scope of AM Program: The TWG desired to clarify and Scott Loveless briefly reviewed some legal issues regarding scope of the AMP. The TWG will clarify the issues to Scott Loveless, deal with the scope issue first, the AMP Strategic Plan second, and other issues as they arise and/or become relevant. He will distribute a written set of responses to the issues paper for the February 4-5, 1999, meeting. The scope issue will be addressed at that meeting. The group will attempt to produce an outline for the strategic plan by the end of the meeting.

Recommendation: The TWG was directed to communicate their questions and policy issues directly to Scott Loveless by January 19, 1999. Scott Loveless will receive chapters 1-3 of the GCMRC 2000-2004 Strategic Plan and comments submitted by the TWG to date.

TWG Chairperson: Robert Winfree reviewed the AMWG's charge of: "reviewing its structure, evaluating its effectiveness, seeking an outside facilitator and outside rules and deal

with the issue of Chairmanship compensation, conflict resolution and decision making." WAPA offered a nomination of Gary Burton for the new TWG Chairperson. WAPA does not need to be compensated for this position.

Recommendation: The group shall discuss the issue further at its February 18, 1999, meeting.

BHBF: The TWG was charged to plan a BHBF from 2-4 days, up to 44,000 cfs, in March or April 1999. This task was based on the following AMWG recommendation: "based on a recommendation from the TWG, to conduct a BHBF in Water Year 99, between March 1 and April 30, from 2-4 days, at a magnitude of up to 44,000 cfs. The Bureau of Reclamation will seek a letter of concurrence from the U.S. Fish and Wildlife Service with respect to all endangered species."

The TWG was also charged to plan a flood and post-flood experimental treatment for May, June and July 1999. This task was based on the following AMWG recommendation: "the TWG and the GCMRC be charged with developing a research plan for an experimental flood and post flood experimental flows contingent on the ability to do good science, get funding and complete compliance and following the triggering criteria (established by the GCMRC and approved by TWG and AMWG)." A clarification was made to the motion: "this applies to March through July." The TWG shall determine if the size and magnitude of the flow will be different than March-April, and whether or not it will plan a specific post flood water regime. If the decision is made for a specific post flood regime, a research plan will be developed. Compliance will be sought accordingly. The group discussed costs involved in development of the research plan, which is currently not budgeted. The overall cost estimate for a science plan is not yet available, and will vary depending on research occurring on the river at the time of a BHBF. Development of that plan will be added to the GCMRC staff's workload, and costs will be borne by the staff salaries budget. This task will not replace but may delay other planned projects.

A suggestion was made to have a BHBF issues discussion meeting during lunch on February 16, 1999. Whichever TWG members want to participate can obtain BHBF input from some of the scientists participating in the symposium.

FY2000 GCMRC Budget: Barry Gold (GCMRC) requested guidance from the TWG on recommended revisions to the FY2000 Monitoring and Research Plan.

Recommendation: The TWG shall submit any additional comments to the GCMRC in electronic format by January 19, 1999. The plan shall be reviewed, discussed and approved at the February 23-24, 1999, Annual Plan workshop meeting.

FY2001 AMP Budget: Bruce Moore stated that the USBR needs an AMP program budget estimate by April 1999, and a bottom line budget in August. The TWG shall begin discussions

in March 1999 and the budget shall go forward for approval by the AMWG at its July 1999 meeting.

Native American Funding for Future AMP Participation: Kurt Dongoske identified an issue that this funding may have impacts to the FY2000 and FY2001 plans. Although the federal agencies were tasked to address the issue with the affected tribal nations, the TWG is likely to address it by default in its regular budget review process.

TCD: The TWG shall submit comments to USBR. A \$200,000 cost was identified in the FY2000 budget for development of the selective withdrawal research plan. A question was raised about how this may affect GCMRC's budget and the FY2000 monitoring and research plan.

GCD Management Objectives and Information Needs: In March 1999 the TWG will do an annual review of the MO's and IN's. The MO's and IN's will be updated, the TWG will ensure that they correlate with the Strategic Plan, and IN's which have been completed by GCMRC will be deleted. GCRG's suggested changes previously submitted will be reviewed. Any new IN's should also be discussed. If selective withdrawal has been implemented for FY2000 these IN's will need to be incorporated and prioritized. A prioritization process will need to be decided on. The Chairperson requested a facilitator for the March 1999 TWG meeting.

Lake Powell Split: The group discussed a plan to accomplish the Lake Powell split of MO's and IN's which was tasked to the TWG by the AMWG in July 1998. Norm Henderson, chairperson of the Lake Powell Split Ad Hoc Group, will prepare a draft and distribute it to the TWG prior to its February 18, 1999, meeting.

Recommendation: The TWG plans to finalize the Lake Powell split of MO's and IN's along with the GCD MO's and IN's annual review process which is scheduled for the TWG meeting in March 1999.

BHBF Assessment/Proposed Action for Programmatic Approach to Compliance: A decision needs to be made on a definition, or a preliminary definition which can be refined as information is gained, and submitted to Tony Morton before April 1999. The group discussed the possibility of factoring in the special flows and fall tributary inputs. To meet the 135 day requirement, the consultation request must be submitted to the USFWS by September 1999.

Recommendation: Tony Morton (USBR) and Bruce Moore will draft a proposed federal action for programmatic compliance and for the May/June/July BHBF and other steady flows. The drafts will be reviewed by the TWG.

WRAP-UP

A table of Action Items and other scheduling information is included at the end of these minutes.

Upcoming Meetings & Proposed Agenda Items:

TWG Strategic Plan Issues Workshop: February 4-5, 1999 (ADWR, Phoenix, AZ) BHBF Discussions (open meeting): February 16, 1999 (lunch meeting)

TWG: February 18, 1999 (GCNP, Albright Training Center):

- Proposed Action for Programmatic Compliance/BHBF Assessment
- TWG Chairperson Roles & Responsibilities

NRC/GCMRC Preliminary Report Feedback Meeting: February 18, 1999 (to be scheduled) TWG Annual Plan Workshop: February 23-24, 1999 (ADWR, Phoenix, AZ)

TWG: March 16-17, 1999 (Embassy Suites, Phoenix, AZ):

- MO's & IN's
- Cultural Program Presentations
- Review FY2001 AMP budget

Lake Powell Split Ad Hoc Group: March 16, 1999 (N. Henderson, Chair) Spill Avoidance Ad Hoc Group: March 17, 1999 (R. Peterson, Chair)

TWG: April 20-21, 1999 (Embassy Suites, Phoenix, AZ)

TWG: July 20, 1999 (1-4 p.m. only - pre-AMWG meeting; Embassy Suites, Phoenix, AZ) July 22, 1999 (1-4 p.m. only - post-AMWG meeting; Embassy Suites, Phoenix, AZ)

Meeting Evaluation: Positive comments were received from the group during the meeting evaluation. A facilitator and note taker for action items would be useful. Points made should not be personal. Side conversations need to be limited and controlled. Everyone should have a voice in the process. Resolution of issues needs to be more focused by making more formal, specific motions, shown on screen, and printed out for the group. Motions suggested at the AMWG meetings by the TWG should be discussed well in advance and articulated in detail; they should be available on paper or disk and ready for AMWG review and decision. Action items should be added to the end of TWG and AMWG minutes. AMWG minutes should be distributed within two weeks to streamline TWG task planning. Meeting evaluations should be continued. Chairpersons of ad hoc groups are responsible for keeping their group on track. The TWG Chairperson is responsible for contacting them between meetings to check on status of action items. When ad hoc group tasks are completed, the group is automatically disbanded.

Public Comment: All comments voiced were regarding the AMWG meeting held earlier today, but also could apply to the TWG:

- 1. During the AMWG meeting there were many disruptive side discussions. It was suggested that Steve Magnussen call a five-minute break when members need to caucus.
- 2. Agendas should include a brief explanation of what action the group should take (e.g., recommendation, action item, approval, commitment of resources or funding). Also, the paper copies should have the documents numbered and collated in order according to agenda items.

Adjournment: There being no further business, the Chairperson adjourned the meeting at 3:36 p.m.

Respectfully submitted,

/s/

Serena Mankiller, GCMRC Secretary

TWG SCHEDULING & ACTION ITEMS CALENDAR

(Identified at TWG Meeting Jan. 13, 1999)

| # | Topic/Issue for Discussion/Decision | Action Items (if applicable) | Action Dead- line | Person/ Group Responsible | For Meeting Date |
|---|--|--|--|---------------------------------|---|
| 1 | Scope/AMP Strategic Plan/Issues -issues need resolution | -draft Strategic Plan or Outline -Submit issues to Scott Loveless by 1/19/99 | Feb 4 Jan 19 | TWG | Feb 4 |
| 2 | TWG Chairperson/Processes -how TWG is organized, who will be leading the program | Review revised roles & responsibilities | before Feb 18 | TWG lead: Bruce Moore | Feb 18 Decision ; Update AMWG July 99 |
| | Nominations for 1999 TWG Chair | Nominate Chair | | TWG | Feb 23 |
| | Election of 1999 TWG Chair | Elect Chair | | TWG | Mar 16 Decision |
| 3 | BHBF -draft of proposed federal action for programmatic needed -draft of proposed action for May/June/July BHBF is needed -USFWS concurrence is needed | -USBR will draft proposed actionsUSBR will seek letter of concurrence. | actions due to Tony Morto n before April | T. Morton B. Moore | Not stated |
| | -Load preceding/following issue & alternatives needs more discussion (GCMRC received two comments from TWG so far) -recommend a post-flood regime for 1999 | TWG to submit comments to GCMRC on "BHBF Alternatives Assessment" | not stated | TWG | Feb 18 |
| 4 | GCMRC FY2000 Monitoring and Research Plan -comments process to be refined | -submit comments on Chap 4 to GCMRC by 1/19 | Jan 19 | TWG | Feb 23 |
| | | -Annotated Chap 4 will be dist to TWG 2 weeks prior to 2/23 meeting | Feb 9 | GCMRC | |
| 5 | TCD EA -comments still needed on the EA | TWG to submit comments to BOR on TCD EA | Mar 31 | TWG | N/A |
| 6 | Flow Chart/Calender Need identified for a calendar which includes budget, MO's/IN's, SP, AP, etc. | -Develop flow chart to track assignments. -Incorporate into SP. -Discuss at a later date. | None stated | TBD | TBD |

| 7 | FY2000 GCMRC Budget -Barry Gold needs guidance | -Submit add'l comments to GCMRC electronically | Jan 19 | TWG | Feb 23 Decision |
|---|--|---|---------------------------|-------------|--|
| | from the TWG re: revisions | -Review/approve plan | Feb 23 | | |
| 8 | FY2001 AMP Budget -discussions to begin in March | -provide USBR an AMP program budget estimate | Apr | TWG | Apr 20; AMWG July 99 Approval |
| | | -provide USBR bottom line budget | Aug | | Aug mtg |
| 9 | Lake Powell MO's/IN's Split -Plan needed to accomplish split | -Prepare draft & dist for TWG review | prior to Feb 18 mtg | N.Henderson | Discuss Feb 18; Finalize Mar 99 |

General Key to Adaptive Management Program Acronyms

ADWR - Arizona Department of Water Resources

AF - Acre Feet

AGFD - Arizona Game & Fish Department

AGU - American Geophysical Union

AM - Adaptive Management

AMP - Adaptive Management Program

AMWG - Glen Canyon Adaptive Management Work

Group

AOP - Annual Operating Plan

BA - Biological Assessment

BE - Biological Evaluation

BHBF - Beach/Habitat-Building Flow

BHMF - Beach/Habitat Maintenance Flow

BHTF - Beach/Habitat Test Flow

BIA - Bureau of Indian Affairs

BO - Biological Opinion

BOR - Bureau of Reclamation

CAPA - Central Arizona Project Assn.

cfs - cubic feet per second

CRBC - Colorado River Board of California

CRCN - Colorado River Commission of Nevada

CREDA - Colorado River Energy Distributors Assn.

CRSP - Colorado River Storage Project

CWCB - Colorado Water Conservation Board

DBMS - Data Base Management System

DOI - Department of the Interior

EA - Environmental Assessment

EIS - Final Environmental Impact Statement

ESA - Endangered Species Act

FACA - Federal Advisory Committee Act

FEIS - Final Environmental Impact Statement

FRN - Federal Register Notice

FWS - United States Fish & Wildlife Service

FY - Fiscal Year (Oct 1 to Sept 30 each year)

GCD - Glen Canyon Dam

GCMRC - Grand Canyon Monitoring and Research

Center

GCNP - Grand Canyon National Park

GCNRA - Glen Canyon National Recreation Area

GCPA - Grand Canyon Protection Act

HBC - Humpback Chub (endangered native fish)

HMF - Habitat Maintenance Flow

HPP - Historic Preservation Plan

IEDA - Irrigation and Electrical Districts

Association of Arizona

IN - Information Need (stakeholder)

IT - Information Technology (GCMRC program)

KAS - Kanab ambersnail (endangered species list -

snail)

KAWG - Kanab Ambersnail Work Group

LCR - Little Colorado River

LCRMCP: Little Colorado River Multi-Species

Conservation Program

MAF - Million Acre Feet

MA - Management Action

MO - Management Objective

NAAO - Native American Affairs Office

NAU - Northern Arizona University (Flagstaff, AZ)

NEPA - National Environmental Policy Act

NGS - National Geodetic Survey

NHPA - National Historical Preservation Act

NPS - National Park Service

NRC - National Research Council

O&M - Operations & Maintenance (USBR funding)

PA - Programmatic Agreement

PEP - Protocol Evaluation Panel

Powerplant Capacity - 31,000 cfs

Reclamation - United States Bureau of Reclamation

RFP - Request For Proposals

RPA - Reasonable and Prudent Alternative

SAB - Science Advisory Board

Secretary('s) - Secretary of the Interior

SWCA - Steven W. Carothers Associates

TCD - Temperature Control Device (for Glen

Canyon Dam water releases)

TCP - Traditional Cultural Property

TES - Threatened and Endangered Species

TWG - Glen Canyon Technical Work Group

UCR - Upper Colorado Region (of the USBR)

UCRC - Upper Colorado River Commission

UDWR - Utah Division of Water Resources

USBR - United States Bureau of Reclamation

USFWS - United States Fish & Wildlife Service

USGS - United States Geological Survey

WAPA - Western Area Power Administration

WY - Water Year (a calendar year)